

# **Kidney Disorders as Serious Adverse Drug Reactions of Remdesivir in Covid-19: A Retrospective Case-Non case Study**

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## **SUPPLEMENTARY DATA**

**Supplementary Table S1. Characteristics of kidney disorder cases reported with remdesivir in COVID-19 patients within the WHO global safety database**

| <b>Reporting characteristics</b>                  | <b>N (%)</b> |
|---|--------------|
| Continent of reporting                            |              |
| - America   | 290 (88.7%)  |
| - Europa  | 36 (11.0%)   |
| - Oceania   | 1 (0.3%)     |
| Type of reporter                                  |              |
| - Pharmacist                                      | 231 (70.6%)  |
| - Physician                                       | 52 (15.9%)   |
| - Other health professional                       | 30 (9.2%)    |
| - Consumer  | 2 (0.6%)     |
| - Unknown   | 12 (3.7%)    |
| Month of reporting                                |              |
| - February  | 1 (0.3%)     |
| - March   | 3 (0.9%)     |
| - April   | 4 (1.2%)     |
| - May   | 8 (2.4%)     |
| - June  | 67 (20.5%)   |
| - July  | 7 (2.1%)     |
| - August  | 237 (72.5%)  |
| Sex – male (%)                                    | 217 (66.3%)  |
| Age – years                                       | 65 (55-73)   |
| Patients with fatal course*                       | 73 (22.3%)   |
| Treatment duration – days                         | 3 (1-4)      |
| Serious cases                                     | 301 (92.0%)  |
| Renal reaction with fatal outcome                 | 15 (4.6%)    |
| Type of kidney disorders                          |              |
| - Acute kidney injury or renal failure            | 295 (90.2%)  |
| - Tubular necrosis                                | 8 (2.4%)     |
| - Anuria or dysuria                               | 3 (0.9%)     |
| - Polyuria  | 2 (0.6%)     |
| - Other or unspecified                            | 19 (5.8%)    |
| Cases with no other suspected drug                | 316 (96.6%)  |
| Concomitant nephrotoxic drugs – number of cases** |              |
| - None  | 242 (74.0%)  |
| - One   | 75 (22.9%)   |
| - Two   | 6 (1.8%)     |
| - Three   | 4 (1.2%)     |

\* Fatal course does not indicate that the patient died even if it was not necessarily due to the reaction. This represents a proxy for poor health status.

\*\* Detailed list of concomitant nephrotoxic drugs: see Suppl. Data S3.

**Supplementary data S2. List of MedDRA terms used to identify COVID-19 patients in drug indication**

A.R.D.S., Acute respiratory distress syndrome, Acute respiratory failure, Adult respiratory distress syndrome, Adult respiratory stress syndrome, ARDS, Asymptomatic COVID-19, Bilateral pneumonia, Corona virus infection, Coronavirus disease 2019, Coronavirus infection, Coronavirus pneumonia, Coronavirus test positive, Covid -19 Pneumonia, COVID-19, COVID-19 Infection, COVID-19 PCR test positive, COVID-19 pneumonia, COVID-19 prophylaxis, COVID-19 respiratory infection, COVID-19 treatment, COVID-19 virus test positive, CPVOD-19, Distress respiratory, Interstitial lung disease, Interstitial pneumonia, Novel COVID-19-infected pneumonia, Pneumonia, Pneumonia viral, Pneumonia unspecified, Pneumonitis, SARS, SARS-CoV-2 acute respiratory disease, SARS-CoV-2 infection, SARS-CoV-2 test, SARS-CoV-2 test positive, Suspected COVID-19, Suspected SARS-CoV-2 infection, Viral pneumonia, Viral pneumonitis.

**Supplementary data S3. Concomitant or suspected nephrotoxic drugs identified in kidney disorders cases reported with remdesivir.**

Noteworthy, one case can include more than one nephrotoxic drug.

Vancomycin n=59; bumetanide n=11; lisinopril n=6; chlorothiazide n=4; spironolactone n=2; enalapril n=2; hydrochlorothiazide n=2; hydrochlorothiazide;lisinopril n=2; hydrochlorothiazide;irbesartan n=1; aciclovir n=1; amikacin n=1; amphotericin b n=1; candesartan n=1; captopril n=1 ; chlortalidone n=1; cobicistat;elvitegravir;emtricitabine;tenofovir n=1 ; irbesartan n=1; nimesulide n=1; trandolapril;verapamil n=1.